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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,703	08/22/2001	Suhail S. Saquib	8447	9450

7590 04/18/2003

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EXAMINER

TRAN, HUAN HUU

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 04/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

FILE COPY

**Office Action Summary**

Application No.

09/934,703

Applicant(s)

SAQUIB ET AL.

Examiner

Huan H. Tran

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-53 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 13-15 is/are rejected.
- 7) ☒ Claim(s) 4-12 and 16-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 13-15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Konaka Toshio et al (JP 03-024972 cited in the IDS filed on 08/22/01).

JP 03-024972 discloses a method (and a thermal printer in which the method is practiced), the method comprising the steps of:

. computing an input energy to provide to the print head element based on a current temperature of the print head element and a plurality of one-dimensional functions of a desired output density to be printed by the print head element;

. providing the input energy to the print head element;

wherein the current temperature of the print head element comprises a predicted current temperature of the print head element estimated by the temperature estimation part 6.

***Allowable Subject Matter***

3. Claims 23-53 are allowed.

4. Claims 4-12, 16-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

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With respect to claims 23 and dependent claims thereof, prior art of record do not teach or suggest the claimed apparatus for producing a plurality of input energies to provide to a plurality of print head elements in a thermal print head to produce a printed image corresponding to a source image having a distribution of desired densities.

With respect to claim 26 and dependent claims thereof prior art of record do not teach or suggest the claimed method for developing, for each of a plurality of print head cycles, a plurality of input energies to be provided to the plurality of print head elements during the print head cycle to produce a plurality of output densities.

With respect to claim 34 and dependent claims thereof prior art of record do not teach or suggest the claimed thermal printer having a means for developing, for each of a plurality of print head cycles, a plurality of input energies to be provided to the plurality of print head elements during the print head cycle to produce a plurality of output densities.

With respect to claim 41 and dependent claims thereof prior art of record do not teach or suggest the claimed method for developing an input energy to provide to a print head element in a print head of a thermal printer to produce output having a desired density.

With respect to claim 48 and dependent claims thereof prior art of record do not teach or suggest the claimed thermal printer comprising a the claimed means for developing an input energy to provide to the print head element in a print head of a thermal printer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huan H. Tran whose telephone number is (703) 308-0749. The examiner can normally be reached on M-F with alternate Friday off, from 7:30am to 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Fuller can be reached on (703) 308-0079. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1749.



Huan H. Tran  
Primary Examiner  
Art Unit 2861

hht  
April 16, 2003